

LUNG & BRONCHUS

Table 1: Incidence and mortality summary
South Dakota, 2003

	All races combined			White	American Indian
	Total	Male	Female		
Incidence count*	496	294	202	479	14
S.D. incidence ¹	59.2	78.8	44.4	59.6	§
U.S. incidence	58.5	73.0	48.0	59.5	■
Death count ¹	405	246	159	389	15
S.D. death rate ¹	47.6	66.4	33.8	47.5	§
U.S. death rate ²	54.2	71.9	41.2	54.5	31.7

Healthy People 2010 Objective: 44.9 deaths per 100,000 persons

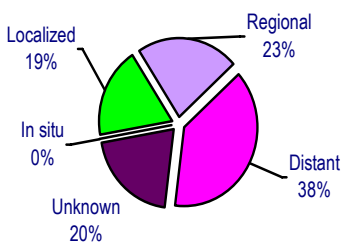
Notes: ■ Rate is not available

§ Rates less than 16 counts are suppressed because of instability of rates

Rates are per 100,000 persons, age-adjusted to the 2000 U.S. standard population

+ Source: South Dakota Department of Health * SEER 13 Registries 1990-2003

Figure 1: Lung and bronchus stage at diagnosis³
South Dakota 2003



³ SEER SUMMARY STAGE 2000

Source: South Dakota Department of Health

Descriptive Epidemiology

Incidence: Lung and bronchus cancer cases were the third leading cancer during 2003 with 13% of cases reported. By race, 479 whites and 14 American Indians were diagnosed with invasive lung and bronchus cancer. The lung cancer incidence rates increased with age. More males than females were diagnosed.

Stage at diagnosis: In South Dakota 51% of all cases, were diagnosed at late stages; regional and distant stages. Since 20% were unstaged, these figures could be higher. Generally, this cancer is diagnosed at later stages when prognosis is poor, resulting in a high mortality/incidence ratio.

Mortality: There were 389 deaths among whites and 15 among American Indians. Even though the 2003 rate for American Indians is not presented because of low numbers, they had higher rates than the national rates and South Dakota rates for the period, 1999-2003. Males died at a rate of 1.76 times females and deaths peaked at the 75-79 age group.

For the five-year period 1999-2003, the trend for lung and bronchus death rates for South Dakota showed decreases of -4.0 percent change (PC) with -0.7 annual percent change (APC). White had a -1.8% PC for whites and a 0 (APC) while there was a larger decrease for American Indians with a -30.9 PC and a -9.7 APC.

The mortality/incidence ratio in 2003 in South Dakota was 0.81 for all races.

Years of Potential Life Lost (YPLL₇₅) in 2003: 265 years for whites and 26.5 years for American Indians.

Average Years of Life Lost (AYLL₇₅) in 2003: 14 years for whites and 9 years for American Indians

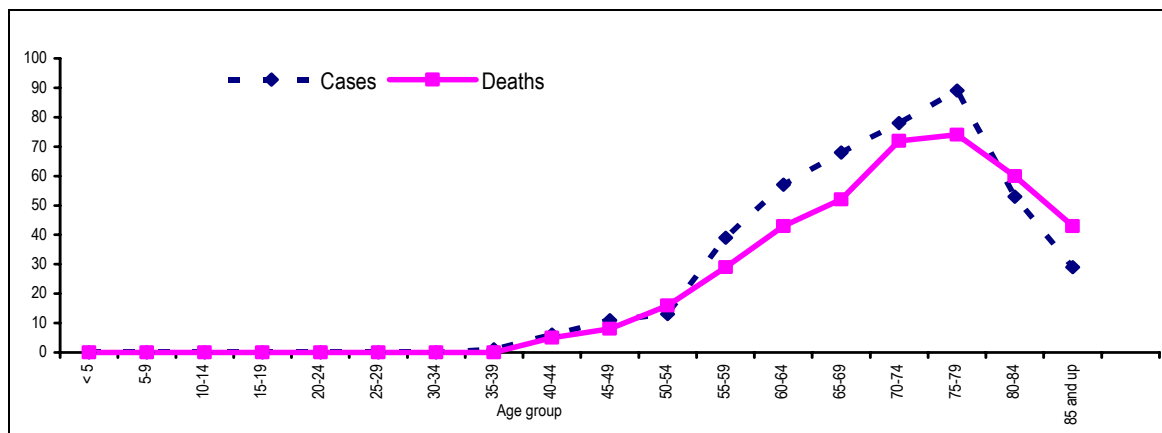
Risk and Associated Factors

Cigarette smoking, including exposure to second hand smoke, is the most important risk factor accounting for 68 to 78% of lung cancer deaths among females and 88 to 91% among males. Occupational or environmental exposures such as radon, asbestos, coal tars, crystalline silica and polycyclic aromatic hydrocarbons increase risk. One to two percent of lung cancer deaths are attributable to air pollution.

Early Detection and Prevention

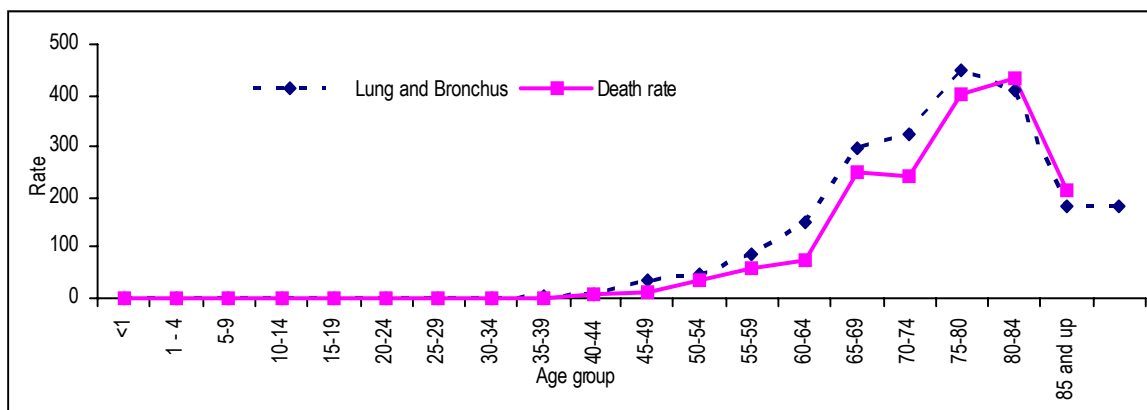
There are no recommendations for screening. Early detection of lung cancer is difficult because symptoms usually do not appear until the disease is advanced. The best prevention is to quit smoking. Smoking is responsible for 66 percent of lung cancers. Treatment options may involve a combination of surgery, radiation and chemotherapy.

Figure 2 : Lung and bronchus cases and deaths by age, South Dakota 2003



Source: South Dakota Department of Health

Figure 3 : Lung and bronchus age specific rates cases and deaths, South Dakota 2003



Rates are per 100,000 persons

Source: South Dakota Department of Health

Table 2 : Lung & bronchus age-adjusted incidence 2001-2003 and age-adjusted death rates 1999-2003, South Dakota and United States

		All races combined			White	American Indian/PI
		Total	Male	Female		
<u>2001-2003</u>	SD incidence count	1457	880	577	1388	62
3 years	S.D. incidence rate	58.7	79.5	42.6	58.1	78.3
incidence ¹	U.S. SEER incidence rate ²	63.7	80.7	51.3	64.7	38.0
<u>1999-2003</u>	SD death count	2008	1249	759	1905	98
5 years deaths ¹	S.D. death rate	48.3	68.9	32.8	47.5	76.9
	U.S. SEER death rate ²	55.1	74.8	41.0	56.9	35.5

Healthy People 2010 44.9 deaths per 100,000 persons

Note: Rates are per 100,000 persons, age-adjusted to the 2000 U.S. standard population

Source: ¹ South Dakota Department of Health ² SEER Cancer Statistics Review 1975--2003